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http://www.cas.org/support/stngen/stndoc/properties.html

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=> exp beclomethasone/cn
E.1
                   1 BECLOMETASONE 21-GLYCOLATE/CN
                   1
                           BECLOMETASONE DIPROPIONATE/CN
E2
E3
                   1 --> BECLOMETHASONE/CN
                 1 --> BECLOMETHASONE/CN

1 BECLOMETHASONE 17,21-DIPROPIONATE/CN

1 BECLOMETHASONE 17-MONOPROPIONATE/CN

1 BECLOMETHASONE 17-PROPIONATE/CN

1 BECLOMETHASONE 17A,21-DIPROPIONATE/CN

1 BECLOMETHASONE 21-BUTYRATE/CN

1 BECLOMETHASONE 21-MONOPROPIONATE/CN

1 BECLOMETHASONE 21-PALMITATE 17-PROPIONATE/CN

1 BECLOMETHASONE 21-PROPIONATE/CN

1 BECLOMETHASONE DIPENTANOATE/CN
E.4
E5
E.6
Ε7
E8
Ε9
E10
E11
E12
=> s e3-e4
                    1 BECLOMETHASONE/CN
                    1 "BECLOMETHASONE 17,21-DIPROPIONATE"/CN
L15
                    2 (BECLOMETHASONE/CN OR "BECLOMETHASONE 17,21-DIPROPIONATE"/CN)
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=> s 115

L17

3598 GVHD 4419 (GRAFT VERSUS HOST) OR GVHD

=> s tansplant or transplanted or transplantation or xenograft 0 TANSPLANT

28240 TRANSPLANTED 90594 TRANSPLANTATION

9135 XENOGRAFT

L18 112402 TANSPLANT OR TRANSPLANTED OR TRANSPLANTATION OR XENOGRAFT

=> s 116 and 117 and 118 L20 16 L16 AND L17 AND L18

=> d 120 1-16 ti abs bib

L20 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Beclometasone dipropionate: a topically active corticosteroid for the treatment of gastrointestinal graft-versus-host disease

- Acute graft-vs.-host disease (GVHD) is one of the most severe AR complications following allogeneic transplantation and the involvement of the gut has been associated with increased mortality and a poorer response to transplant. The use of systemic corticosteroids remains the standard first-line treatment, despite their severe secondary effects. Beclometasone dipropionate (BDP) is a topically active corticosteroid with low absorption into the systemic circulation, which minimizes many of the deleterious side effects associated with systemic corticosteroids. Phase II and III trials evaluating the efficacy of BDP were reviewed. In the Phase II trials, 77% of patients with gastrointestinal GVHD who received BDP as a single agent responded and 50% did not require systemic corticosteroids, thus avoiding prolonged exposure to prednisone. Randomised trials demonstrated that BDP is safe and effective in treating acute gastrointestinal GVHD when used with a short induction course of prednisone, reducing the risk of GVHD treatment failure by > 60% and reducing mortality one year after randomization by 45%. These results provide a particularly strong rationale for the incorporation of steroid-sparing regimens such as oral BDP in acute GVHD treatment.
- AN 2008:972708 HCAPLUS <<LOGINID::20090513>>
- DN 149:283129
- TI Beclometasone dipropionate: a topically active corticosteroid for the treatment of gastrointestinal graft-versus-host disease
- AU Diez-Campelo, Maria; Sanchez-Guijo, Fermin M.; Simon, Jose A. Perez
- CS Centro en Red de Terapia Celular y Medicina Regenerativa de Castilla y Leon, Servicio de Hematologia, Hospital Universitario de Salamanca and the Centro de Investigacion del Cancer (USAL/CSIC), Salamanca, 37007, Spain
- SO Expert Opinion on Investigational Drugs (2008), 17(9), 1389-1401 CODEN: EOIDER; ISSN: 1354-3784
- PB Informa Healthcare
- DT Journal
- LA English
- RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Beclometasone oral DOR BioPharma: beclomethasone oral DOR BioPharma
- AΒ A review. DOR BioPharma is developing an oral tablet formulation of beclometasone diproprionate for the treatment and prevention of gastrointestinal graft-vs.-host disease (GvHD) and for the treatment of gastrointestinal radiation injury. Beclometasone is a potent corticosteroid that has been marketed worldwide since the early 1970s as the active ingredient in a nasal spray and in a metered-dose inhaled formulation for the treatment of allergic rhinitis and asthma. The oral formulation under development with DOR, known as orBec, is a single product consisting of two enteric-coated tablets. One tablet is intended to release beclometasone in the proximal portions of the gastrointestinal tract, while the other tablet is intended to release the agent in the more distal portions of the tract. OrBec is designed to reduce the need for systemic immunosuppressive drugs, thereby improving the outcome of bone marrow and stem cell transplantation. DOR is awaiting regulatory approval of orBec in the EU and the US for the treatment of acute gastrointestinal GvHD. The product is also the subject of a phase II trial for the prevention of GvHD, and a preclin. animal study in radiation injury. OrBec may also have application in treating other gastrointestinal disorders characterized by severe inflammation including irritable bowel syndrome, ulcerative colitis and Crohn's disease. DOR BioPharma has stated that orBec has the potential to be of significant benefit to pediatric patients with Crohn's disease. The oral beclometasone formulation was initially in development with Enteron

Pharmaceuticals, a subsidiary of Corporate Technol. Development. Enteron obtained the rights to oral beclometasone through an exclusive, worldwide, royalty-bearing license agreement with George B. McDonald, M.D., in Oct. 1998. The agreement provided Enteron with the option to grant sublicenses for the rights to the intellectual property and know-how relating to the agent. However, Corporate Technol. Development was acquired by Endorex Corporation in Dec. 2001 and the resulting company underwent a name change to become DOR BioPharma. In Feb. 2008, DOR BioPharma entered into a Letter of Intent with BL&H in regard to the administration of a Named Patient Program (NPP) for orBec to patients with gastrointestinal GvHD in South Korea. This agreement gives the right for medical practitioners to prescribe investigational drugs to patients who qualify. DOR will be responsible for the manufacture and supply of orBec while BL&H will be covering distribution costs in Korea. According to a letter of intent signed in Nov. 2007, Orphan Australia has agreed to act as a sponsor for DOR BioPharma with regard to the administration of a Named Patient Access Program (NPAP) for orBec to patients with gastrointestinal GvHD in Australia, New Zealand and South Africa. Under the NPAP compassionate use drug supply program, the Therapeutic Goods Administration (TGA) allows medical practitioners to supply investigational drugs to patients who qualify. Both Orphan Australia and DOR will receive revenue for supplying orBec under the NPAP. New Zealand and South Africa also have similar access mechanisms for supply under a named patient basis. DOR BioPharma received \$US3 million under a non-binding letter of intent from Sigma-Tau Pharmaceuticals in Jan. 2007. The agreement granted Sigma-Tau an exclusive right to negotiate terms and conditions for a possible business transaction or strategic alliance regarding or Bec and potentially other DOR BioPharma pipeline compds. until 1 March 2007. Under the terms of the agreement, Sigma-Tau purchased \$US1 million of DOR BioPharma's common stock, with an addnl. \$US2 million paid in cash. However, as no agreement was reached by the specified date, DOR returned the \$US2 million to Sigma-Tau in June 2007. DOR BioPharma received an unsolicited proposal from Cell Therapeutics, Inc. to acquire DOR BioPharma in Jan. 2007. Because of the non-binding agreement already signed with Sigma-Tau, DOR BioPharma was not able to consider the merger proposal. In Nov. 2001, Corporate Technol. Development (now DOR BioPharma) initiated a phase II trial in the US to evaluate the efficacy of orBec in the treatment of Crohn's disease. This trial is no longer active but DOR BioPharma is exploring the possibility of continuing the testing of orBec for Crohn's Disease. The US FDA issued a non-approvable letter in Oct. 2007 in response to the NDA submitted by DOR BioPharma for the use of orBec in the treatment of gastrointestinal GvHD. The non-approvable letter followed on from a ruling by the Oncol. Drugs Advisory Committee (ODAC) of the FDA in May 2007 that the data package supporting the product did not show substantial evidence of efficacy for the treatment of gastrointestinal GvHD. The FDA requested data from addnl. clin. trials to demonstrate safety and efficacy of the product, as well as information regarding other sections of the NDA. Research for this compound has been aided by a \$8.5 million common stock purchase agreement between DOR BioPharma and Fusion Capital Fund II, LLC, which was confirmed in Feb. 2008. In Feb. 2008, DOR BioPharma completed clin. trials for the use of the drug in the treatment of gastrointestinal GvHD. It showed that significantly fewer patients randomized to orBec had deterioration of pulmonary diffusing capacity by transplant day 80 compared with placebo. It may have a protective effect accompanied by prevention of clin. pulmonary events. These beneficial effects on the lungs may be due to the delivery of the immunosuppressant 17-BMP, an active metabolite of BDP, to the pulmonary artery. Therefore oral BDP may prevent pulmonary interstitial inflammation and subsequent lung injury. The data provided in the MAA and NDA submissions demonstrated that orBec provided a lower risk of mortality compared with the standard of care. Both filings were

supported by data from two randomized, double-blind, placebo-controlled clin. trials. The first trial was a 60-patient phase II trial conducted at the Fred Hutchinson Cancer Research Center. The addnl. trial was a 129-patient pivotal phase III trial of orBec conducted at 16 centers in the US and France. The phase III trial failed to meet its primary endpoint of treatment failure through 50 days after allogeneic hemopoietic stem cell transplantation. However, orBec did achieve statistical significance in the secondary endpoints of time to treatment failure through day 80, and a reduction in mortality compared with placebo. In this trial, patient survival at the pre-specified endpoint of 200 days post-transplant showed a statistically significant 66% reduction in mortality among patients randomized to orBec. DOR BioPharma believes the primary endpoint was not achieved as a result of a higher than expected rate of treatment failures during the initial 10 days in both treatment groups. The EMEA commenced a review of the MAA for orBec in the treatment of gastrointestinal GvHD, in Nov. 2006. A response is expected by DOR BioPharma in the first half of 2008. DOR BioPharma has commenced a phase II trial of orBec to prevent gastrointestinal GvHD in patients undergoing a donor stem cell transplant for haematol. cancer. The trial is supported by a National Institutes of Health (NIH) grant awarded to the Fred Hutchinson Cancer Research Center. The randomized, double-blind trial will enroll 138 patients, with 92 patients in the orBec arm and 46 patients in the placebo arm. Treatment will be administered in conjunction with a conditioning regimen and will continue for 75 days after transplant. The trial aims to determine if prophylactic administration of orBec can favorably influence the incidence and severity of acute GvHD, thereby decreasing the need for high-dose systemic corticosteroid treatment. DOR received FDA clearance to conduct the phase II trial in March 2007. Patient enrollment is expected to be completed in the second quarter of 2008.

- AN 2008:965763 HCAPLUS <<LOGINID::20090513>>
- DN 149:369451
- TI Beclometasone oral DOR BioPharma: beclomethasone oral DOR BioPharma
- AU Anon.
- CS N. Z.
- SO Drugs in R&D (2008), 9(4), 271-276 CODEN: DRDDFD; ISSN: 1174-5886
- PB Wolters Kluwer Health
- DT Journal; General Review
- LA English
- RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate in gastrointestinal graftversus-host disease
- AB A review. Beclomethasone dipropionate is a corticosteroid with topical activity for inflammatory disorders at mucosal surfaces. Oral beclomethasone dipropionate (orBec) has demonstrated activity in gastrointestinal acute graft-vs.-host disease (aGVHD) associated with hematopoietic cell transplantation. Since the GI tract is the dominant aGVHD target in many patients, oral beclomethasone dipropionate reduces the requirement for systemic immunosuppressive drugs in treating aGVHD. In this patient population, reduced exposure to systemic corticosteroids is associated with fewer infections and, possibly, preserved graft-vs.-tumor effects, yielding a statistically significant improvement in survival in a randomized, multicenter clin. trial.
- AN 2007:1160840 HCAPLUS <<LOGINID::20090513>>
- DN 147:480458
- TI Oral beclomethasone dipropionate in gastrointestinal graftversus-host disease

- AU Hockenbery, David M.
- CS Fred Hutchinson Cancer Research Center, Seattle, WA, 98109-1024, USA
- SO Expert Review of Clinical Immunology (2007), 3(5), 695-700 CODEN: ERCIBU; ISSN: 1744-666X
- PB Future Drugs Ltd.
- DT Journal; General Review
- LA English
- RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate: a topically active corticosteroid for the treatment of gastrointestinal graft-versushost disease following allogeneic hematopoietic cell transplantation
- A review. Beclomethasone dipropionate (BDP) is a topically active AR anti-inflammatory corticosteroid. Oral BDP is metabolized in the intestine to a potent metabolite, 17-beclomethasone monopropionate (17-BMP). An oral formulation (orBec; DOR BioPharma), consisting of a gastric release and an enteric-coated pill, was studied in patients with acute gastrointestinal graft-vs.-host disease, an inflammatory disorder that is common after allogeneic hematopoietic cell transplantation . Randomized trials demonstrated that orBec is safe and effective in treating acute gastrointestinal graft-vs.-host disease (GVHD) when used with a short induction course of prednisone, reducing the risk of GVHD treatment failure by > 60% and reducing mortality 1 yr after randomization by 45%, with fewer deaths due to infection and recurrent malignancy. The type of conditioning and the type of donor had no effect on the frequency of GVHD treatment failure during the 80-day study period; the greatest benefit in terms of survival was among patients who had received reduced-intensity conditioning therapy and among those who received a graft from other than a human leukocyte antigen-matched sibling. OrBec controls the intestinal inflammatory process of GVHD and avoids prolonged exposure to prednisone, which is the present standard of care. Oral BDP is the only therapy to be studied in the last 30 years to effectively treat acute GVHD and reduce mortality.
- AN 2007:1137572 HCAPLUS <<LOGINID::20090513>>
- DN 147:515137
- TI Oral beclomethasone dipropionate: a topically active corticosteroid for the treatment of gastrointestinal graft-versus-host disease following allogeneic hematopoietic cell transplantation
- AU McDonald, George B.
- CS Gastroenterology/Hepatology Section, Fred Hutchinson Cancer Research Center and University of Washington School of Medicine, Seattle, WA, 98109-1024, USA
- SO Expert Opinion on Investigational Drugs (2007), 16(10), 1709-1724 CODEN: EOIDER; ISSN: 1354-3784
- PB Informa Healthcare
- DT Journal; General Review
- LA English
- RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI A randomized, placebo-controlled trial of oral beclomethasone dipropionate as a prednisone-sparing therapy for gastrointestinal graft-versus-host disease
- AB We tested the hypothesis that oral beclomethasone dipropionate (BDP) would control gastrointestinal graft-vs.-host disease (GVHD) in

patients with anorexia, vomiting, and diarrhea. Patients were randomized to prednisone for 10 days and either oral BDP 8 mg/d (n = 62) or placebo (n = 67) tablets for 50 days. At study day 10, prednisone was rapidly tapered while continuing study drug. On an intent-to-treat basis, the risk of GVHD-treatment failure was reduced for the BDP group at study day 50 (hazard ratio [HR] 0.63, 95% confidence interval [CI] 0.35-1.13) and at 30 days follow-up (HR 0.55, 95% CI 0.32-0.93). Among patients eligible for prednisone taper at study day 10, the risk of GVHD-treatment failure was significantly reduced at both study days 50 and 80 (HR 0.39 and 0.38, resp.). By day 200 after transplantation, 5 patients randomized to BDP had died compared with 16 deaths on placebo, a 67% reduction in the hazard of mortality (HR 0.33, P = .03). In 47 recipients of unrelated and HLA-mismatched stem cells, mortality at transplantation day 200 was reduced by 91% in the BDP group compared with placebo (HR 0.09, P = .02). The survival benefit was durable to 1 yr after randomization. Oral BDP prevents relapses of gastrointestinal GVHD following tapering of prednisone; survival is statistically significantly better among patients receiving BDP.

- AN 2007:562544 HCAPLUS <<LOGINID::20090513>>
- DN 146:475836
- TI A randomized, placebo-controlled trial of oral beclomethasone dipropionate as a prednisone-sparing therapy for gastrointestinal graft-versus-host disease
- AU Hockenbery, David M.; Cruickshank, Scott; Rodell, Timothy C.; Gooley, Ted; Schuening, Friedrich; Rowley, Scott; David, Donald; Brunvand, Mark; Berryman, Brian; Abhyankar, Sunil; Bouvier, Michelle; McDonald, George B.
- CS The orBec GVHD Study Group, Fred Hutchinson Cancer Research Center and University of Washington School of Medicine, Seattle, FL, USA
- SO Blood (2007), 109(10), 4557-4563 CODEN: BLOOAW; ISSN: 0006-4971
- PB American Society of Hematology
- DT Journal
- LA English
- RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Beclometasone oral DOR BioPharma
- A review. OrBec is an oral enteric-coated tablet formulation of the AB corticosteroid beclomethasone, which has been developed by Enteron Pharmaceuticals, a subsidiary of Corporate Technol. Development (now DOR BioPharma). OrBec is being developed for the treatment of gastrointestinal graft-vs.-host disease (GVHD) and an NDA has been filed in the US. DOR BioPharma has also filed an MAA in Europe for the same indication. OrBec is designed to reduce the need for systemic immunosuppressive drugs, thereby improving the outcome of bone marrow and stem cell transplantation. DOR BioPharma may seek a marketing partner in the US and elsewhere for orBec in GVHD and will seek a partner for other potential indications of the drug. In Dec. 2001, Corporate Technol. Development was acquired by Endorex Corporation (now DOR BioPharma). In Oct. 1998, Enteron Pharmaceuticals (DOR BioPharma) entered into an exclusive, worldwide, royalty bearing license agreement with George B. McDonald, MD, including the right to grant sublicenses, for the rights to the intellectual property and know-how relating to orBec. In Jan. 2007, DOR BioPharma received \$US3 million under a non-binding letter of intent from Sigma-Tau Pharmaceuticals. The agreement grants Sigma-Tau an exclusive right to negotiate terms and conditions for a possible business transaction or strategic alliance regarding or Bec and potentially other DOR pipeline compds. until 1 March 2007. Under the terms of the agreement, Sigma-Tau purchased \$US1 million of DOR's common

stock, with an addnl. \$US2 million paid in cash. If no agreement is reached by 1 March 2007, DOR will return the \$US2 million to Sigma-Tau within 60 days. DOR BioPharma received an unsolicited proposal from Cell Therapeutics, Inc. to acquire DOR BioPharma in Jan. 2007. Because of the non-binding agreement already signed with Sigma-Tau, DOR BioPharma's board of directors cannot consider Cell Therapeutics' merger proposal at this time. OrBec has been filed for approval in the US for the treatment of gastrointestinal GVHD. The US FDA accepted the NDA filing and has established a target date of 21 July 2007 for completion of review of the NDA. In Nov. 2006, the EMEA determined that the MAA for orBec for the treatment of gastrointestinal GVHD is complete and that the review process has begun. The data provided in the MAA and NDA submissions demonstrate that orBec safely provides a lower risk of mortality compared with the current standard of care. Both filings are supported by data from two randomized, double-blinded, placebo-controlled clin. trials. The first was a 129-patient pivotal phase III clin. trial for orBec conducted at 16 bone marrow/stem cell transplant centers in the US and France. The second trial was a 60-patient phase II clin. trial conducted at the Fred Hutchinson Cancer Research Center. In the primary endpoint of its pivotal trial, time to treatment failure through day 50, orBec failed to achieve statistical significance (p-value 0.1177). However, orBec did achieve statistical significance in the secondary endpoints of time to treatment failure through day 80, and a reduction in mortality compared with placebo. In this trial, patient survival at the prespecified endpoint of 200 days post-transplant showed a statistically significant 66% reduction in mortality among patients randomized to orBec. DOR BioPharma believes the primary endpoint was not achieved due to a higher than expected rate of treatment failures during the initial 10 days in both treatment groups. The mortality benefit in favor of orBec was confirmed in a retrospective anal. of the phase II study, in which there was a 55% reduction in mortality at 200 days post-transplant. At 1 yr after randomization, there were relatively consistent 51% and 45% redns. in the risk of mortality among patients randomized to orBec in both the phase III and phase II studies, resp. DOR BioPharma is also conducting a phase II clin. trial to investigate orBec in the prevention of gastrointestinal GVHD. DOR BioPharma has executed an exclusive license agreement with the University of Texas Medical Branch at Galveston for the use of oral luminally active anti-inflammatory drugs, such as orBec, for the treatment of irritable bowel syndrome.

- AN 2007:516820 HCAPLUS <<LOGINID::20090513>>
- DN 147:132500
- TI Beclometasone oral DOR BioPharma
- AU Anon.
- CS N. Z.
- SO Drugs in R&D (2007), 8(2), 91-94 CODEN: DRDDFD; ISSN: 1174-5886
- PB Wolters Kluwer Health
- DT Journal; General Review
- LA English
- RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate as an initial treatment of gastrointestinal acute graft-versus-host disease after reduced-intensity cord blood transplantation
- AB The medical, pathol. and laboratory records of five patients with gastrointestinal (GI) graft-vs.-host disease (GVHD) who were treated with oral beclomethasone dipropionate (BDP) are reviewed. Between March 2003 and Dec. 2004, 38 patients with hematol. diseases or solid tumors underwent RI-CBT at Toranomon Hospital. The preparative regimen

mainly comprised fludarabine 125 mg/m2, melphalan 80 mg/m2 and 4 Gy total body irradiation GVHD prophylaxis was cyclosporine 3 mg/kg or tacrolimus 0.03 mg/kg. A total of 17 (44.7%) patients developed grade II-IV acute GVHD, and five of them were treated with oral BDP. This study showed that oral BDP is a useful agent for the treatment of GI acute GVHD following RI-CBT. It suppresses allogeneic immune responses in the gut without causing significant immunosuppression. However, this study is too small to draw a definite conclusion on oral BDP.

- AN 2006:1044617 HCAPLUS <<LOGINID::20090513>>
- DN 146:92954
- TI Oral beclomethasone dipropionate as an initial treatment of gastrointestinal acute graft-versus-host disease after reduced-intensity cord blood transplantation
- AU Miura, Y.; Narimatsu, H.; Kami, M.; Kusumi, E.; Matsumura, T.; Yuji, K.; Wake, A.; Miyakoshi, S.; Taniguchi, S.
- CS Department of Hematology, Toranomon Hospital, Tokyo, Japan
- SO Bone Marrow Transplantation (2006), 38(8), 577-579 CODEN: BMTRE9; ISSN: 0268-3369
- PB Nature Publishing Group
- DT Journal
- LA English
- RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate for the treatment of gastrointestinal acute graft-versus-host disease ( GVHD)
- AΒ Acute graft-vs.-host disease (aGVHD) remains one of the most severe complications after allogeneic transplantation; in particular, the presence of gut involvement has been related to increased mortality and poorer response. The use of systemic steroids remains the standard for first-line treatment despite its severe secondary effects. Beclomethasone dipropionate (BDP) is a topically active corticosteroid with low absorption, thereby avoiding many of the deleterious side effects associated with systemic steroids. In the present study we analyzed the efficacy of BDP in a series of 26 patients who were diagnosed with grade 1 and 2 gastrointestinal aGVHD. Twenty patients (77%) responded to BDP treatment, 17 (65.5%) reached complete remission (CR), and 3 (11.5%) showed partial response. Among those patients who reached CR, 5 relapsed, although 1 of them reached second CR after a second course of BDP; therefore, 13 (50%) of the 26 patients did not require systemic steroids to treat gastrointestinal aGVHD. CR rates in those showing gastrointestinal symptoms were 68% for patients with persistent nausea, 50% for those with vomiting, and 54% for those with diarrhea (P = .2). No patient included in the study developed any symptom related to adrenal axis suppression. Thirteen patients (50%) developed ≥1 infectious episode during the first 100 days after transplantation. Transplant-related mortality was 0% at 100 days, and overall transplant-related mortality was 30%, with only 2 patients dying due to infectious complications. Therefore, our study shows that monotherapy with oral BDP is an effective initial therapeutic approach for mild to moderate intestinal GVHD , which avoids complications related to systemic steroids.
- AN 2006:1025336 HCAPLUS <<LOGINID::20090513>>
- DN 146:93687
- TI Oral beclomethasone dipropionate for the treatment of gastrointestinal acute graft-versus-host disease ( GVHD)
- AU Castilla, C.; Perez-Simon, J. A.; Sanchez-Guijo, F. M.; Diez-Campelo, M.; Ocio, E.; Perez-Persona, E.; Lopez-Villar, O.; Vazquez, L.; Caballero, D.;

San Miguel, J. F.

- CS Servicio de Hematologia, Hospital Clinico Universitario y Centro de Investigacion del Cancer, Salamanca, Spain
- SO Biology of Blood and Marrow Transplantation (2006), 12(9), 936-941 CODEN: BBMTF6; ISSN: 1083-8791
- PB Elsevier Inc.
- DT Journal
- LA English
- RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Treatment of graft-versus-host disease and leukemia with beclomethasone dipropionate and prednisone
- AB A method for reducing mortality associated with GVHD by treating the patent with an oral BDP regimen that involves co-administration of:
  (1) a high dose of prednisone (about 1-2 mg/kg/day) for about 10 days, which is then tapered rapidly over the following 7 days to a physiol. replacement dose of about 0.0625 mg/kg/day for the remainder of the treatment, and (2) about 4-12 mg oral BDP q.i.d. for about 50 days, where the BDP is administered in both immediate release and enteric coated prepns. Another method is for treating leukemia by performing hematopoietic cell transplantation followed by said regimen. A significant reduction in patient mortality is observed 200 days after the start of these treatments.
- AN 2006:655514 HCAPLUS <<LOGINID::20090513>>
- DN 145:96877
- TI Treatment of graft-versus-host disease and leukemia with beclomethasone dipropionate and prednisone
- IN McDonald, George B.; Stergiopoulos, Nicholas; Kanzer, Steve
- PA Dor Biopharma, Inc., USA
- SO PCT Int. Appl., 39 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
ΡΙ	WO 2006072093 WO 2006072093									WO 2005-US47666					20051230				
		W: RW:	CN, GE, KZ, MZ, SG, VN,	CO, GH, LC, NA, SK, YU,	CR, GM, LK, NG, SL, ZA,	CU, HR, LR, NI, SM, ZM,	CZ, HU, LS, NO, SY, ZW	DE, ID, LT, NZ, TJ,	DK, IL, LU, OM, TM,	DM, IN, LV, PG, TN,	DZ, IS, LY, PH, TR,	BG, EC, JP, MA, PL, TT,	EE, KE, MD, PT, TZ,	EG, KG, MG, RO, UA,	ES, KM, MK, RU, UG,	FI, KN, MN, SC, US,	GB, KP, MW, SD, UZ,	GD, KR, MX, SE, VC,	
			CF, GM,	CG, KE,	CI, LS,	CM,	GA, MZ,	GN, NA,	GQ,	GW,	ML,	RO, MR, TZ,	NE,	SN,	TD,	TG,	BW,	GH,	
	·				A1 20060706				AU 2005-321826						20051230				
	CA	2583	244			A1 20060706				CA 2005-2583244						20051230			
	US	2006	0252	735		A1		2006	1109	US 2005-320564						20051230			
	EΡ	1830	857			A2		2007	0912		EP 2005-856121					20051230			
		R:	IS,	IT,	•	LT,	•	•	•	•	•	ES, PT,	•	•	•	•	•	•	
	CN 101060848 JP 2008526773			,	A	20071024 20080724			CN 2005-80039395 JP 2007-549693										

	KR	2007089701	A	20070831	KR	2007-713835	20070619
	IN	2007KN02783	A	20070831	IN	2007-KN2783	20070730
PRAI	US	2004-640178P	P	20041230			
	WO	2005-US47666	W	20051230			

- RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Long-term use of oral beclomethasone dipropionate for the treatment of gastrointestinal graft-versus-host disease
- AΒ Treatment of severe acute and chronic gastrointestinal (GI) graft-vs.-host disease (GVHD) with prolonged high-dose systemic corticosteroids has limited success and considerable toxicity. Beclomethasone dipropionate (BDP) is a potent topically active steroid. We treated 15 patients with acute (n = 2) or chronic (n = 13) GI GVHD refractory to systemic corticosteroids with 28-day courses of oral BDP (2 mg 4 times daily). Response was measured by the change in GI score (sum of 6 GI symptoms) as well as the ability to taper or discontinue systemic corticosteroids. Nine (60%) of 15 evaluable patients responded to BDP, including 3 complete responses (a GI score of 0 or 1 and discontinuation of systemic corticosteroids). Attempts to taper calcineurin inhibitor during BDP therapy were unsuccessful. The 2 patients with acute GVHD had no response to BDP. Responders received a median of 3 cycles (range, 1-20), compared with 1 cycle (range, 1-5) in nonresponders. Suppression of the hypothalamic-adrenal axis was seen in 2 of the 5 patients tested, but neither demonstrated clin. significant symptoms. conclude that BDP is safe and effective for long-term treatment of chronic GI GVHD. Multiple courses may be necessary to achieve or maintain response in some patients, and prolonged BDP therapy is a feasible alternative to prolonged systemic corticosteroids.
- AN 2005:1034438 HCAPLUS <<LOGINID::20090513>>
- DN 144:45624
- TI Long-term use of oral beclomethasone dipropionate for the treatment of gastrointestinal graft-versus-host disease
- AU Iyer, Renuka V.; Hahn, Theresa; Roy, Hilary N.; Battiwalla, Minoo; Cooper, Mary; Anderson, Barbara; Paplham, Pam; Brown, Karen; Bambach, Barbara; Segal, Brahm H.; McCarthy, Philip L., Jr.
- CS Department of Medicine, Roswell Park Cancer Institute, Buffalo, NY, USA
- SO Biology of Blood and Marrow Transplantation (2005), 11(8), 587-592 CODEN: BBMTF6; ISSN: 1083-8791
- PB Elsevier Inc.
- DT Journal
- LA English
- RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Method of treatment of cancer by controlling graft-versus-leukemia using topical active corticosteroids
- AB A method for the improved treatment of blood-borne cancers, such as lymphomas, leukemia, and myeloma is disclosed. The method comprises the oral administration of an effective amount of a topically active corticosteroid (TAC) to a patient who has undergone hematopoietic cell transplantation. Administration of the TAC controls a graft-vs.-leukemia (GVL) reaction that is induced following a hematopoietic cell transplantation, so that a GVHD reaction does not develop, or is reduced in severity. The GVL reaction effects killing of cancerous tumor cells in the blood, mediated by the cells derived from the hematopoietic cell transplantation.
- AN 2003:118593 HCAPLUS <<LOGINID::20090513>>
- DN 138:148132

- TI Method of treatment of cancer by controlling graft-versus-leukemia using topical active corticosteroids
- IN McDonald, George B.; Stergiopoulos, Nicholas
- PA USA
- SO U.S. Pat. Appl. Publ., 5 pp.
  - CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 20030032631	A1	20030213	US 2001-928890	20010813		
PRAI	US 2001-928890		20010813				

- L20 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Method of long-term treatment of graft-versushost disease using topical active corticosteroids
- AB A method for long-term therapy using corticosteroids to treat tissue damage associated with graft-vs.-host disease in a patient having undergone hematopoietic cell transplantation, and host-vs.-graft disease in a patient having undergone organ allograft transplantation. The method includes orally administering to the patient a therapeutically effective amount of a topically active corticosteroid, such as beclomethasone dipropionate, from the 29th day until the 56th day following hematopoietic cell or organ allograft transplantation. Representative tissues includes tissue of the intestine and liver, while representative tissue damage includes inflammation thereof.
- AN 2002:505407 HCAPLUS <<LOGINID::20090513>>
- DN 137:42096
- TI Method of long-term treatment of graft-versushost disease using topical active corticosteroids
- IN McDonald, George B.; Stergiopoulos, Nicholas
- PA USA
- SO U.S. Pat. Appl. Publ., 4 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

T T 7114 • C 14 T	_				
PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US	20020086857	A1	20020704	US 2001-753814	20010103
US	20040006053	A1	20040108	US 2003-613788	20030703
PRAI US	2000-233194P	P	20000915		
US	2001-753814	B1	20010103		

- L20 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone therapy for recurrent small bowel allograft rejection and intestinal graft-versus-host disease
- AB The efficacy of oral beclomethasone treatment in three small bowel transplant recipients who had multiple episodes of acute small bowel rejection and one with graft-vs.-host disease was studied. Baseline immunosuppression included tacrolimus and steroids. Mycophenolate mofetil was added in two patients without improvement prior to the initiation of beclomethasone therapy. The three patients had adequately functioning grafts as showed by the independence from i.v. fluids and parenteral nutrition for most of their posttransplant course. After initiation of beclomethasone therapy each demonstrated less rejection or GVHD and fewer infectious complications than prior to beclomethasone therapy. The use of beclomethasone for essentially local immunosuppression in these patients allowed for a significant decrease in the systemic dose of steroids and other immunosuppressive agents without compromising the

transplanted bowel. Beclomethasone is efficient in the prevention of small bowel allograft rejection. It is a viable alternative for standard immunosuppression for small bowel transplant recipients.

- AN 2002:404398 HCAPLUS <<LOGINID::20090513>>
- DN 137:380162
- TI Oral beclomethasone therapy for recurrent small bowel allograft rejection and intestinal graft-versus-host disease
- AU Sudan, D.; Grant, W.; Iyer, K.; Shaw, B.; Horslen, S.; Langnas, A.
- CS University of Nebraska Medical Center, Omaha, NE, USA
- SO Transplantation Proceedings (2002), 34(3), 938-939 CODEN: TRPPA8; ISSN: 0041-1345
- PB Elsevier Science Inc.
- DT Journal
- LA English
- RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Method using oral administration of a topically active corticosteroid for preventing tissue damage associated with graft-versus-host or host-versus-graft disease following transplantation
- AB A method is provided for preventing tissue damage associated with graft-vs.-host disease in a patient having undergone hematopoietic cell transplantation, and host-vs.-graft disease in a patient having undergone organ allograft transplantation. The method includes orally administering to the patient a prophylactically effective amount of a topically active corticosteroid, such as beclomethasone dipropionate, for a period of time following hematopoietic cell or organ allograft transplantation, and prior to the presentation of symptoms associated with graft-vs.-host disease or host-vs.-graft disease. Representative tissues includes tissue of the intestine and liver, while representative tissue damage includes inflammation thereof.
- AN 2000:531659 HCAPLUS <<LOGINID::20090513>>
- DN 133:115533
- TI Method using oral administration of a topically active corticosteroid for preventing tissue damage associated with graft-versus-host or host-versus-graft disease following transplantation
- IN McDonald, George B.
- PA Institute for Drug Research, Inc., USA

US 1998-151388 A

- SO U.S., 5 pp., Cont.-in-part of U.S. Ser. No. 103,762. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.					KIND		DATE			APPLICATION NO.						DATE			
ΡI	US 6096731					20000801				US 1998-151388						19980910				
	CA 2413883				A1 20011129				CA 2000-2413883						20000522					
	WO 2001089529					A1 20011129				WO 2000-US14064					20000522					
		W:	ΑE,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,		
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,		
			IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,		
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,		
			SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UΖ,	VN,	YU,	ZA,	ZW				
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,		
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,		
			CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG					
PRAI	US	1998	-103	762		A2		1998	0624											

19980910

WO 2000-US14064 W 20000522

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L20 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate for treatment of intestinal graft -versus-host disease: a randomized, controlled trial
- AB Beclomethasone dipropionate (BDP), a topically active steroid, seemed to be an effective treatment for intestinal graft-vs.-host disease ( GVHD) in a phase I study. The aim of this study was to compare the effectiveness of oral BDP to that of placebo capsules in treatment of intestinal GVHD. Sixty patients with anorexia and poor oral intake because of intestinal GVHD were randomized to receive prednisone (1 mg  $\cdot$  kg-1  $\cdot$  day-1) plus either oral BDP (8 mg/day) or placebo capsules. Initial responders who were eating at least 70% of caloric needs at evaluation on day 10 continued to take study capsules for an addnl. 20 days while the prednisone dose was rapidly tapered. The primary end point was the frequency of a durable treatment response at day 30 of treatment. The initial treatment response at day 10 was 22 of 31 (71%) in the BDP/prednisone group vs. 16 of 29 (55%) for the placebo/prednisone group. The durable treatment response at day 30 was 22 of 31 (71%) vs. 12 of 29 (41%), resp. (P = 0.02). The combination of oral BDP capsules and prednisone was more effective than prednisone alone in treating intestinal GVHD. Oral BDP allowed prednisone doses to be rapidly tapered without recurrent intestinal symptoms.
- AN 1998:450133 HCAPLUS <<LOGINID::20090513>>
- DN 129:198161
- OREF 129:40103a,40106a
- TI Oral beclomethasone dipropionate for treatment of intestinal graft -versus-host disease: a randomized, controlled trial
- AU Mcdonald, George B.; Bouvier, Michelle; Hockenbery, David M.; Stern, Jean M.; Gooley, Ted; Farrand, Allen; Murakami, Carol; Levine, Douglas S.
- CS Gastroenterology/Hepatology, Clinical Statistics, and Clinical Nutrition Sections, Division of Clinical Research, Fred Hutchinson Cancer Research Center and University of Washington School of Medicine, Seattle, WA, USA
- SO Gastroenterology (1998), 115(1), 28-35 CODEN: GASTAB; ISSN: 0016-5085
- PB W. B. Saunders Co.
- DT Journal
- LA English
- RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Oral beclomethasone dipropionate for treatment of human intestinal graft-versus-host disease
- AΒ Oral beclomethasone dipropionate (BDP), a potent, topically active corticosteroid, was investigated as therapy for the title disease. Allogeneic marrow-graft recipients with biopsy-proven intestinal graft-vs.-host disease of mild-to-moderate severity received BDP (8 mg daily) for ≤28 days. Improvement was seen in appetite, oral food intake, nausea, and diarrhea over the course of therapy, and an overall beneficial response was observed in 72% of 40 evaluable patients. Surveillance cultures of throat and stools showed no increase in bacterial or fungal colonization over time. The adrenal axis became suppressed in 11 of 20 evaluable patients (55%) but suppression was not a prerequisite for clin. response, as 6 of 9 patients who retained normal adrenal function improved clin. It is concluded that oral BDP is a safe and effective treatment for mild-to-moderate intestinal graft-vs.-host disease. Systemic absorption probably occurs, but adrenal suppression is not a prerequisite for clin. efficacy, suggesting that the biol. effect is

- primarily topical.
- AN 1996:49517 HCAPLUS <<LOGINID::20090513>>
- DN 124:165529
- OREF 124:30435a,30438a
- TI Oral beclomethasone dipropionate for treatment of human intestinal graft-versus-host disease
- AU Baehr, Paul H.; Levine, Douglas S.; Bouvier, Michelle E.; Hockenbery, David M.; Gooley, Ted A.; Stern, Jean G.; Martin, Paul J.; McDonald, George B.
- CS Clinical Research Division of the Fred Hutchinson Cancer Research Center, University of Washington, Seattle, WA, USA
- SO Transplantation (1995), 60(11), 1231-8 CODEN: TRPLAU; ISSN: 0041-1337
- PB Williams & Wilkins
- DT Journal
- LA English